

ABSTRACT OF THE DISCLOSURE

A thin-film magnetic head has an inductive write head element including an upper core layer with a front end section magnetically coupling with an upper magnetic pole, a lower core layer with a front end section magnetically coupling with a lower magnetic pole, a coil conductor formed to pass between the upper core layer and the lower core layer, and an coil insulation layer for sandwiching the coil conductor. At least one thermal diffusion layer with a good thermal conductivity is formed on the coil insulation layer at an outside region of the upper core layer, or at least one thermal diffusion layer is formed at an outside region of the upper core layer to contact with a part of the coil conductor or to constitute a part of the coil conductor.